Statement of Work

For

General Materials or Services

Title: Industrial Control Systems Engineering Task-Based Support

Date: 4/26/2022

Revision Number: 1

Requisition Number: 356886

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1 INTRODUCTION / BACKGROUND

The Department of Energy, Richland Operations Office, (DOE-RL) manages the Hanford Site working toward protecting the workers, public, and environment by further reducing risk, as well as providing the necessary infrastructure for continued safe and effective cleanup operations, access and use. This is accomplished by work performed by contractors and subcontractors, to ensure the safety of Hanford cleanup.

As a Prime Contractor to the U.S. Department of Energy, Hanford Mission Integration Solutions (HMIS) is responsible for providing direct support to the DOE-RL and its contractors with cost effective infrastructure and site services integral and necessary to accomplish the Hanford Site environmental cleanup mission.

HMIS Engineering is responsible for providing infrastructure-related services to support operations at the Hanford Site. This work includes operations and maintenance of existing systems and new projects to increase the reliability of existing systems and other new initiatives as requested by the client. To support projects and other engineering work products, HMIS requires experienced industrial control systems (ICS) engineering support to accomplish defined tasks.

Engineering services requested by HMIS in this Statement of Work are associated with facilities and systems classified as General Service and considered non-nuclear and non-radiological. As such, nuclear facility experience or qualifications are not required to perform this work.

1.1 OBJECTIVE

HMIS Engineering requires the services of an experienced subcontractor to provide ICS engineering resources to accomplish the tasks described in section 1.3.

1.2 DESCRIPTION OF WORK – GENERAL

The subcontractor shall provide technically qualified resources that work as a part of a team under the direct oversight of HMIS. Subcontractor resources shall be responsible for independently planning, organizing, and performing a wide variety of non-hazardous specialized administrative/technical duties in support of the successful completion of goals and deliverables. Additionally, the subcontractor shall furnish all necessary labor, technical and professional services, supervision, materials, tools, equipment, consumables, and payment of any applicable taxes to perform all operations necessary and required to perform the scope as directed by HMIS

Unless otherwise approved, the subcontractor shall work in accordance with HMIS subcontract requirements, operating policies and procedures and shall be responsible for execution of the work in accordance with the quality standards and requirements specified for assigned project and facility.

Specifically, HMIS requires a subcontractor to provide ICS Engineering support to review design deliverables, perform peer reviews, support the development of functional requirements and design criteria documents, provide facility walk-down support, and respond to miscellaneous information requests from HMIS Engineering.

1.3 DESCRIPTION OF WORK – SPECIFIC

The work products and services to be provided, including any specific HMIS standards and requirements, required

for the successful completion of this work activity includes ICS engineering support is to perform the following tasks and provide the listed deliverables to the task requestor and BTR:

1. Support HMIS Design Authorities in the review of design deliverables (e.g., design change notices, specifications, calculations, technical reports, facility modification packages, etc.) for Reliability Investment Portfolio Projects. These are performed by reviewing relevant documents and recording the review comments in the format identified by the task requestor or BTR. The labor hours required for this task will vary based on the stage of the design media and the complexity of the project.

2. Peer review and Subject Matter Expert review of HMIS-generated engineering change requests. These are performed by reviewing relevant documents and recording the review comments in the format identified by the task requestor or BTR. The labor hours required for this task will depend on the size and complexity of the engineering change request and will vary.

3. Support the development of functional requirements and design criteria documents, engineering studies, engineering standards, and other technical analyses, reports, or plans.

4. Provide support for facility walkdowns and drawing as-builts. The labor hours required for this task will vary based on the number of drawings that need to be verified.

5. Respond to miscellaneous information requests from HMIS Engineering Management or Design Authorities.

2 DELIVERABLES/SUBMITTALS

2.1 Deliverables

Will deliverables be required to be furnished by the Subcontractor: Yes

Work products shall be accurate, comply with established processes and procedures (i.e., the Acceptance Criteria), meet established schedules and be appropriately documented. The Subcontractor shall ensure that personnel perform duties in a manner that meets established schedules as outlined below:

The Subcontractor shall provide the following via e-mail to the Buyer's Technical Representative (BTR) and Contract Specialist.

- Employee Job Task Analyses (EJTA), as appropriate, or a document that supports why no EJTA is needed.

  Due Date: Eight (8) Days after award.

- Contractor shall submit a report detailing the tasks that were assigned, completed, and those remaining open going into the next period.

  Due Date: By every two weeks

- Individual Requested Deliverables as defined by the Tasks contained in Section 1.3

Due Date: The Subcontractor will be given a due date for each task identified. The Subcontractor shall ensure each deliverable is provided within the due date(s) assigned.

2.2 Submittals – Removed Effective April 26, 2022

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3 PLACE OF PERFORMANCE

Will work be performed on the Hanford site: Yes- For any work performed on the Hanford Site or any HMIS controlled facility, the provisions of the On-Site Services shall apply to the subcontract personnel.

3.1 Onsite Work Location/Potential Access Requirements

The primary work location under this subcontract shall be the subcontractor office, with periodic site visits as required.

3.2 Site Access And Work Hours

Hanford personnel at the Hanford Site work a standard 4/10 schedule. The standard work week consist of ten (10) hours of work between 6:00 a.m. and 4:30 p.m. with one-half hour designated as an unpaid period for lunch, Monday through Thursday.

Work performed outside normal operating hours shall be coordinated and/or approved through the BTR and/or the Contract Specialist prior to performing the work.

3.3 Badging

For any on-site work, see On-Site Services Special Provisions for details. The subcontractor shall wear a Buyer issued security badge identifying themselves. A minimum of two (2) working days advance notice is needed for site badging. Subcontractor employees will be required to submit to vehicle searches and not personally carry or transport certain prohibited articles.

4 REQUIREMENTS

The requirements listed below are to identify specific standards the subcontractor and subcontractor personnel will be obligated to work to in support of this statement of work.

4.1 Engineering Requirements

Engineering requirements applicable: Yes

Table 1. Applicable Engineering Codes and Standards:

	Number	Title
1.	HMIS-PRO-ENG-286	Testing of Equipment and Systems
2.	HMIS-PRO-ENG-440	HMIS Engineering Package Process
3.	HMIS-PRO-ENG-2001	Facility Modification Package Process
4.	HMIS-PRO-ENG-8016	Design Change Notice Process
5	HMIS-PRO-ENG-8017	As-Built Verification Process
6	HMIS-PRO-ENG-8258	Functional Requirements and Design Criteria
7	HMIS-PRO-ENG-8259	HMIS Calculation Preparation and Issue
8	HMIS-PRO-ENG-8336	Design Verification
9	HMIS-STD-ENG-097	HMIS Engineering Design Codes, Standards and Site-Specific Design Parameters
10	HMIS-STD-ENG-60816	Engineering Test Documentation
11	HMIS-STD-ENG-62384	Standard for Environmental Requirements for Systems, Structures, and Components
12	HMIS-PRO-ENG-61164	Infrastructure System Health and Status Reports

4.2 Environmental, Safety, and Health Requirements

The Subcontractor shall perform work safely, in a manner that ensures adequate protection for employees, the public, and the environment, and shall be accountable for the safe performance of work. The Subcontractor shall comply with and assist the Buyer in complying with environmental and safety requirements of all applicable laws, regulations, and directives.

The subcontractor shall exercise a degree of care commensurate with the work and the associated hazards. The Subcontractor shall ensure that management of environmental and safety functions and activities is an integral and visible part of the Subcontractor's work planning and execution processes. As a minimum, the Subcontractor shall:

- Thoroughly review the defined scope of work;
- Identify hazards and environmental and safety requirements;
- Analyze hazards and implement controls;
- Perform work within controls; and
- Provide feedback on adequacy of controls and continue to improve safety management.

The Subcontractor shall flow down all environmental and safety requirements to the lowest tier Subcontractor performing work on the Hanford site commensurate with the risk and complexity of the work.

Prior to start of work the Subcontractor shall work with the HMIS BTR to do a Job Hazard Analysis (JHA).

All Subcontractor and sub-tier employees shall have completed OSHA Hazard Communication training that meets the requirements of HMIS-PRO-SP-13299, *Hazard Communication*. See HMIS-PRO-SP-10468, *Chemical Management Process*, for more information.

Subcontractors and its lower-tier subcontractors shall be responsible to complete an Employee Job Task Analysis (EJTA) in accordance with HMIS-PRO-SP-11058 for any of the following situations:

- For any subcontractor employee who will be on the Hanford Site for more than 30 days in a year.
- For any subcontractor employee who may potentially be exposed to hazards (e.g. radiological, beryllium, hazardous wastes, noise) while performing in accordance with the subcontract statement of work.
- For any subcontractor employee enrolled in a medical or exposure monitoring program required by 10 CFR 851, and/or any other applicable federal, state or local regulation or other obligation.

If any of the above conditions are met, the Subcontractor and its lower-tier subcontractor employee is to have a current approved EJTA prior to that employee beginning work on the Hanford Site.

Buyer's Safety and Health Procedures are available on the internet at https://hmis.hanford.gov/page.cfm/SubcontractorForms/Construction. The documents on this site are kept current and are available for Subcontractors and lower-tier Subcontractor use.

Unique or specific requirements: **No**

4.3 Quality Assurance Requirements

The work activities for this Statement of Work (SOW) has been designated as a Quality Level G - Q Level 0 - GS. The subcontractor shall be responsible for performing quality workmanship and shall conduct the quality control measures necessary to ensure work conforms to referenced codes and standards, and other requirements defined in this SOW.

Table 2. Quality Assurance Requirements

	Number	Title
1.	HMIS-PLN-QA-599	Quality Assurance Program Description

5 ACCEPTANCE CRITERIA

Work products shall be accurate, comply with established processes and procedures (i.e., the Acceptance Criteria), meet established schedules and be appropriately documented.

6 CONFIGURATION MANAGEMENT

6.1 Configuration Management Requirements

New or revised Engineering Drawings to be released into the HMIS document control system shall be prepared and entered in accordance with the procedures listed in section 4.1

New or revised Technical Documents shall be prepared in accordance with the procedures listed in section 4.1

Design Analysis documentation shall include (1) through (6) below: (1) definition of the objective of the analysis; (2) definition of analysis inputs and their sources; (3) results of literature searches or other applicable background data; (4) identification of assumptions and indication of those that must be verified as the design proceeds; (5) identification of any computer calculation including computer type, computer program (e.g., name), revision identification, inputs, outputs, evidence of or reference to computer program verification and the bases (or reference thereto) supporting application of the computer program to the specific physical problem; (6) review and approval.

New or revised Engineering Change Notices or Field Change Notices shall be prepared and submitted in accordance with the BTR's instruction.

6.2 Applicable Standards

There are no specific applicable standards identified for this SOW. Standards will be identified for each task as applicable.

6.3 Verification/Hold Points

Not Applicable.

7 QUALIFICATIONS

The Subcontractor shall ensure that its personnel meet and maintain the appropriate training, qualifications, and certification requirements to perform the work as specified in this SOW. The subcontractor is expected to provide appropriately trained and qualified staff to perform the type of work associate with their work at the Hanford site. Additionally, the subcontractor shall perform work in accordance with the specifications, exhibits, and other documents, which made by reference, are a part of the SOW.

In order to determine the subcontractor qualified to perform the scope of work as outlined, the subcontractor must have the following qualifications:

Experience levels and qualifications for ICS engineering labor categories expected to be used under this Statement of Work are defined in the Table 5 below.

Discipline Progression	Expected Education and Experience Level Descriptions
Principal Engineer	Applies advanced engineering techniques and analyses for Problems and methods. Has extensive experience in general engineering. Minimum Qualifications: Bachelor of Science (BS) degree in Engineering discipline PLUS 15 or more years engineering experience or equivalent combination of education and experience.
Senior Engineer	Performs conventional design engineering and analysis. Plans and conducts independent evaluation, selection, and adaptation of engineering techniques, procedures, and criteria. When assigned, may provide managerial and/or technical direction to other engineers. Minimum Qualifications: BS degree in Engineering discipline PLUS 10 to 14 years engineering experience or equivalent combination of education and experience.
Advanced Engineer	Under general supervision, evaluates, selects, and applies standard engineering techniques, procedures, and criteria. Minimum Qualifications: BS degree in Engineering discipline PLUS 4 to 9 years engineering experience or equivalent combination of education and experience.
Entry-Level Engineer	Under supervision, performs standardized assignments using standard engineering techniques, procedures, and criteria. Minimum Qualifications: BS Degree in an Engineering Discipline PLUS 0 to 3 years engineering experience or equivalent combination of education and experience.

In addition to the above, the Subcontractor shall provide qualified personnel throughout the period of performance of the Subcontract.. Subcontractor shall be responsible for ensuring its personnel meet and/or maintain current and

valid training requirements, certifications and are fully capable to complete the duties described through the entirety of the Subcontract period of performance.

8 SPECIAL REQUIREMENTS

8.1 Training

The following types of training are required:

1. HGET/HMISGET General Employee Training or Hanford Site Orientation.

The subcontractor shall maintain training records for their personnel and ensure all required training is completed prior to work. Additionally, as soon as practical after award, the subcontractor shall submit a badge request for personnel required under the various releases so that they may be scheduled for training and medical evaluation so that crews will be eligible for work on site. The badging request is required, because without it an HID# cannot be assigned, and therefore training and medical evaluations cannot be easily coordinated and scheduled.

8.2 Use of Government Vehicles

There is no anticipated need for any Subcontractor employees to use a Government-furnished vehicle in the performance of this statement of work. The Subcontractor's employees, therefore, are specifically prohibited from driving any Government-furnished vehicles under the performance of this statement of work unless this statement of work is formally so modified by the parties and the employee(s) will present a valid driver's license to the BTR for review.

8.3 Government Property

Government Property is not anticipated to be furnished to or acquired by Subcontractor under this SOW.

8.4 Hanford System Access Requirements

The following systems shall be utilized to perform the work described. For those systems which HMIS will be responsible for (hereby HMIS Operated System), HMIS will operate, manage, maintain and authorize access for Subcontractor personnel. The Subcontractor shall identify each of its personnel who will require access to the HMIS operated system.

For those systems which the Subcontractor shall be responsible for (hereby Subcontractor Operated System), The Subcontractor shall be responsible for the operation, management, maintenance, and access authorization for these systems.

HMIS personnel shall have unlimited access to the below named Subcontractor Operated Systems, through the period of performance of the Subcontract.

Table 3. Systems

	System Description	HMIS Operated System	Subcontractor Operated System
1.	Document Management Control System	Yes	No

	(DMCS)		
2.	Integrated Document Management System (IDMS)	Yes	No
3.	Hanford Local Area Network (HLAN)	Yes	No
4.	Enterprise Asset Management (EAM)	Yes	No

8.5 Electrical Components

Not Applicable

8.6 Section 508 of Rehabilitation Act Applicability

Section 508 of the Rehabilitation Act requires federal agencies to develop, procure, maintain, and use information and communications technology (ICT) that is accessible to people with disabilities - regardless of whether or not they work for the federal government. Section 508 requires federal agencies to make their ICT such as technology, online training, and websites accessible for everyone. This means that personnel with disabilities are able to do their work on the accessible computers, phones and equipment in their offices, take online training or access internal website to locate needed information.

9 ACCESS AUTHORIZATION/CLEARANCE REQUIREMENTS

The scope of work will not require access authorization (security clearance).

10 MEETINGS

10.1 Meetings

After subcontract award, the subcontractor shall participate in a Project Kickoff Meeting, which may be a conference call, an internet meeting, or a meeting to be held at HMIS Site. The time, date, and agenda for the meeting will be provided to the subcontractor by HMIS.

The subcontractor shall interface with various HMIS (and other) organizations through HMIS's Contract Specialist (or designated BTR for in-scope work), as required, or at points and frequency determined by the Contract Specialist. The person or persons designated by the subcontractor to attend all meetings shall have all required authority to make decisions and commit subcontractor to technical decisions made during meetings.

HMIS will issue meeting notices and prepare an agenda and minutes for each meeting addressed in this Section. When applicable, minutes will identify action items, assigned actionees, and due dates.

In addition, the Subcontractor shall attend the following in support of this work:

Meetings that are identified as part of completing assigned Tasks.

11 INTERFACE/NOTIFICATIONS

A. A BTR will be designated for the subcontract/ subcontract release.

B. Designation of BTR

The BTR is responsible for monitoring and providing technical guidance for this subcontract and should be contacted regarding questions or problems of a technical nature. The BTR is also responsible for appropriate

surveillance of the subcontractor's representative while on site. In no event, however, will an understanding or agreement, modification, change order, or any deviation from the terms of this subcontract be effective or binding upon HMIS unless formalized by proper subcontract documents executed by the Contract Specialist prior to completion of this subcontract. On all matters that pertain to the subcontract terms, the subcontractor shall contact the Contract Specialist specified within this subcontract. When in the opinion of the subcontractor, the BTR requests or directs efforts outside the existing scope of the subcontract; the subcontractor shall promptly notify the Contract Specialist in writing. The BTR does not possess any explicit, apparent or implied authority to modify the subcontract. No action should be taken until the Contract Specialist makes a determination and/or modifies the contract.

C. The work will be inspected daily/periodically by the BTR.

D. The subcontractor shall immediately notify the field Contract Release BTR (who will contact HMIS Safety) of any injuries or incidents; to include damage to subcontractor-owned property or equipment. The subcontractor will follow this up within 24 hours with a written explanation to the Contract Specialist of the occurrence.

E. In the event that there is an abnormal or unusual situation associated with this contract work scope, the subcontractor is to immediately contact the BTR. If, after several attempts, the subcontractor is unable to contact either the BTR or the Contract Specialist, the Contractor is to contact HMIS Occurrence Notification Center at (509) 376-2900, which is available 24 hours a day, seven days a week, and provide them with: Contract Number, Contract Specialist's name, BTR's name and a short summary of the abnormal or unusual situation. If after making contact with HMIS, the subcontractor is advised to suspend activities, the subcontractor is not to proceed until such direction to proceed has been expressly issued by the Contract Specialist. If there is an emergency situation, the subcontractor is to make the appropriate immediate emergency call to 911 or 373-0911 for cell phones and then make the notifications to HMIS as set forth herein.

F. Prior to work in the field, subcontractor shall ensure each employee has been cleared by HMIS and verify all training is complete in accordance with this statement of work.

12 APPENDICES

Appendix A: Removed